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Conceptual hydrological modelling at daily scale: Aggregating results for 340 MOPEX catchments

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We present a large-scale model-implementing study aiming at the comparison of 3 daily conceptual hydrological models. These models comprise a different number of parameters, i.e. 4, 5 and 6 parameters. The comparison is performed for 340 MOPEX catchments, while each of the modelling approaches is assessed by computing the values of 18 metrics for the calibration and validation periods. The results are presented in maps and in an aggregated form, indicating that the models exhibit a quite similar performance, with the 6-parameter model being slightly better than the rest in terms of specific metrics. The metric values are mostly to a small extent better for the calibration set than they are for the validation set.